

REMARKS/ARGUMENTS

Applicants have received the Office Action dated July 3, 2008 (hereinafter “Office Action”), wherein: 1) claims 1-15, 21-34, 40-53, 59-72, 78-87 and 92-95 were rejected under 35 U.S.C. 103(a) as allegedly obvious over Valdevit et al. (U.S. Pat. App. Pub. No. 2002/0156918, hereinafter “Valdevit”) in view of Soloway et al. (U.S. Pat. No. 6,532,212, hereinafter “Soloway”); and 2) claims 17-20, 36-39, 55-58, 74-77 and 88-91 were rejected under 35 U.S.C. 103(a) as allegedly obvious over Valdevit in view of Soloway, and further in view of Srikanth et al. (U.S. Pat. No. 6,430,621, hereinafter “Srikanth”). Applicants have not amended any of the claims. Based upon the arguments presented herein, Applicants respectfully submit that all claims are in condition for allowance.

I. THE INDEPENDENT CLAIM REJECTIONS

In rejecting independent claims 1, 21, 40, 59, 78 and 92 (hereinafter “the Independent Claims”) as allegedly obvious over Valdevit in view of Soloway, it was asserted in the Office Action that “Valdevit discloses the entire claimed invention except for the switch fabric comprises at least two trunk groups,”¹ and further asserted that Soloway “teaches a Fibre Channel fabric comprising Fibre Channel switches 300 and 310 (See Fig 4) and including at least two trunk groups (Fig 4, element 330, 340, 350 and 360) for routing flow traffic (column 2, lines 10-25 and column 6, lines 10-27).”² Applicants respectfully traverse this characterization of the cited art, noting that the elements shown in figure 4, and described in the cited text of column 6, of Soloway are inter-switch links within a single trunk group, not multiple trunk groups as apparently alleged in the Office Action.

More specifically, Soloway teaches that,

FIG. 4 is a block diagram showing a switch pair in a Fibre Channel fabric. Fibre Channel switch 300 is coupled to Fibre Channel switch 310 through a plurality of redundant inter-switch links (ISL's). In the illustrated

¹ Office Action, ¶ 3, p. 4.

² Office Action, ¶ 3, p. 4.

example, five inter-switch links are illustrated having different data rates for transmitting traffic. As shown, **ISL 330** and **ISL 340** transmit traffic at a rate of 1 Gbps; **ISL 350** and **ISL 360** transmit at a rate of 2 Gbps; and **ISL 370** transmits at a rate of 10 Gbps,³

and further that,

In accordance with FIG. 4, the trunking feature of the present invention makes efficient use of the redundant ISLs between neighboring switches 300 and 310. **Trunking refers generally to methods that manage the available communication bandwidth of the plurality of redundant links in aggregate, rather than individually.**⁴

From the cited text it is clear that elements ISL 330-370 are inter-switch links within a trunking group that are managed as redundant links in aggregate (*i.e.*, as a single trunking group), and are not individual trunk groups as the Office Action appears to allege.

For at least these reasons, Applicants respectfully submit that Valdevit does not teach or even suggest selecting an exit port from a set of possible exit ports that includes at least some of the exit ports of at least two trunk groups, as required by the Independent Claims. Further none of the cited art, either alone or together, overcomes the deficiencies of Valdevit. Thus, at least because none of the cited art teaches or suggest all of the limitations of the Independent Claims, Applicants respectfully submit that independent claims 1, 21, 40, 59, 78 and 92, as well as those claims that respectively dependent upon them, are all in condition for allowance.

II. THE DEPENDENT CLAIM REJECTIONS

Dependent claims 2-15, 22-34, 41-53, 60-72, 79-87 and 93-95 were rejected as allegedly obvious over Valdevit in view of Soloway, and dependent claims 17-20, 36-39, 55-58, 74-77 and 88-91 were rejected as allegedly obvious over Valdevit in view of Soloway, and further in view of Srikanth. Applicants respectfully submit that because these claims each depend upon one of the Independent Claims, these dependent claims are all in condition for allowance for at least the same reasons as those presented above

³ Soloway, col. 6, lines 9-16 (emphasis added).

⁴ Soloway, col. 6, lines 21-26 (emphasis added).

with regard to independent claims 1, 21, 40, 59, 78 and 92, thus rendering the additional rejections of the dependent claims moot.

A. Dependent Claim 2

Applicants nonetheless additionally note that in rejecting dependent claim 2, it was alleged in the Office Action that “Valdevit discloses at least all of the exit ports of at least two trunk groups (Fig 8A, elements 812 and 818).”⁵ Applicants respectfully note that it was already acknowledged in the rejection of independent claim 1 (upon which claim 2 depends) that Valdevit fails to disclose a switch fabric that comprises at least two trunk groups. Applicants thus respectfully submit that it is not possible for Valdevit to disclose at least all of the exit ports of at least two trunk groups, given that Valdevit does not disclose the at least two trunk groups that are required by the claim element to include the all of the exit ports.

Further, element (switch) 812 in figure 8A of Valdevit only includes a single egress trunk group (comprising egress ports 824(1) and 824(2)). Similarly, element (switch) 818 includes a single trunk group with multiple ingress ports, but only includes a single egress port (port 828). Applicants respectfully note that the full text of claim 2 requires “wherein said set of possible exit ports includes at least all of the exit ports of at least two trunk groups.” Applicants further respectfully note that claim 1 (upon which claim 2 depends) requires that the set of possible exit ports are all included within a single switch (“applying a process to select an exit port of said switch from a set of possible exit ports”) (emphasis added). Applicants thus respectfully submit that the at least two trunk groups required by dependent claim 2 must be included within a single switch, and this configuration is not taught or even suggested by Valdevit.

For at least these reasons, and in addition to the reasons already presented with regard to independent claim 1 (upon which claim 2 depends), Applicants again respectfully submit that none of the cited art, either alone or together, suggests all of the elements of dependent claim 2, and thus none of the cited art renders the claim obvious.

⁵ Office Action, ¶ 3, p. 4.

B. Dependent Claims 17, 36, 55, 74 and 88

Applicants further respectfully note that in rejecting dependent claims 17, 36, 55, 74 and 88, it was stated in the Office Action that “Valdevit and Soloway disclose the entire claimed invention except for at least one of the set of possible exit ports is selected based at least in part on a source tag or destination tag added to the frame after the frame enters the switch,”⁶ and further alleged that “Srikanth, from the same or similar field of endeavor, teaches selecting exit ports for packet forwarding based on a source or destination tag (column 5, lines 3-29).” Applicants respectfully traverse both the characterization of the claims and the characterization of the cited art, noting that the claims each requires that the addition of the tags and the selection of the exit port both be performed within a single switch, and further noting that the tag addition taught by Srikanth is performed by one switch while the exit port selection taught is performed by another switch.

More specifically, dependent claim 36 (which is representative of all the claims referenced in this rejection) requires “wherein **said first switch selects at least one of said set of possible exit ports** based at least in part on a source tag and/or a destination tag added to said at least one frame **after** said at least one frame **enters said switch**” (emphasis added). Thus, claim 36 requires that the tag be added after entering the same switch that performs the selection of the exit port.

By contrast, Srikanth teaches,

In another example, a packet destined for node C is transmitted by node A and **received at switch 305**, port 2. Given that port 2 is configured to be associated with VLAN 1 in this example, a VLAN tag header is inserted in the packet with a VID=1. The switch again parses this packet using well known filtering techniques, and based on the contents of the packet, **inserts a TPID value of 2** in the TPID field in the tag header at 420. At 425, **the tagged packet is forwarded over the interswitch link to switch 310**. In the same manner as set forth above, **switch 310 receives the**

⁶ Office Action, ¶ 4, p. 6.

tagged packet, determines the TPID and VID values, and **forwards the packet**, stripped of the tag, to port 6 at step 430.⁷

From the above passage, it is clear that Srikanth teaches two switches, wherein a first switch adds a tag to a packet and transmits the modified packet (with the added tag) to a second switch via an exit port that is selected based upon existing information within the packet (*i.e.*, the VID), not based upon the added tag. The modified packet is then received by the second switch (with the tag already added), which selects the exit port based upon the added tag, and strips the tag before forwarding the packet to the selected exit port.

Applicants also respectfully note that the application of the adding and stripping of tags taught by Srikanth to the switches taught by Valdevit and Soloway (so as to produce the single switch required by claim 36) would render the invention taught by Srikanth unsuitable for its intended purpose, negating any motivation or suggestion to combine the two references.⁸ Specifically, the invention taught by Srikanth is directed to “[a] method and apparatus that provides for grouping nodes in multiple VLANs using port based VLAN grouping, and explicitly associates one of multiple VLANs with a packet transmitted by the nodes, using IEEE 802.1Q based frame tagging.”⁹ Srikanth further asserts that “VLANs define groups of nodes in the switched network that are not constrained by the physical location of the nodes.”¹⁰ Applicants respectfully submit that to apply the tag addition/stripping of Srikanth to a single switch would constrain the nodes of the network to the physical location of that single switch, thus making the resulting switch unsuitable for use with the multiple virtual local area networks (VLANs) to which the invention of Srikanth is directed. Thus, because the resulting switch is unsuitable for the intended purpose of the invention taught by Srikanth, Applicants

⁷ Srikanth, col. 5, lines 13-24 (emphasis added); *see also* Srikanth, Fig. 3.

⁸ *See* MPEP 2143.01-V (citing *In re Gordon*, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984)) (“If proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification.”).

⁹ Srikanth, abstract.

¹⁰ Srikanth, col. 1, lines 17-18.

respectfully submit that there is no motivation to combine Srikanth with Valdevit and Soloway.

At least because Srikanth teaches two switches wherein one adds the tag and the other selects the port based on the added tag, Applicants respectfully submit that Srikanth does not teach or even suggest a single switch that selects one of a set of possible exit ports based at least in part on a tag added to a frame after being received by said single switch, as required by dependent claim 36 (and the other similarly rejected claims). Further, none of the cited art overcomes the deficiencies of Srikanth. For at least these reasons, and in addition to the reasons already presented above, Applicants therefore respectfully submit that none of the cited art, either alone or together, teaches or suggests all of the limitations of dependent claims 17, 36, 55, 74 and 88. Additionally, at least for the reasons presented above, Applicants also respectfully submit that there is no motivation to combine Srikanth with Valdevit and Soloway. Applicants thus respectfully submit that these claims are not rendered obvious by the cited art and are all in condition for allowance.

C. Dependent Claims 18, 37, 56, 75 and 89

Applicants additionally note that in rejecting dependent claims 18, 37, 56, 75 and 89, it was stated in the Office Action that “[Srikanth]¹¹ discloses the source tag or destination ta[g] is stripped off the frame before the frame exits the switch (column 5, lines 3-29 wherein the tag is stripped off before forwarding the packet to the selected port).”¹² Applicants respectfully traverse both the characterization of the claims and the characterization of the cited art, noting that the each of the rejected claims requires that the switch that performs the required stripping of the tag be the same switch that adds the tag, and further noting that the Srikanth teaches two separate switches that each performs only one of these functions.

¹¹ Applicants respectfully note that the Office Action actually cites Valdevit, but based upon the citation and the context of the rejections Applicants believe this was a typographical error, and the present response assumes that the Examiner intended to cite Srikanth.

¹² Office Action, ¶ 4, p. 6.

More specifically, dependent claim 37 (which is representative of all the claims referenced in this rejection) requires “wherein **said first switch** strips said source tag and/or said destination tag off said at least one frame before said at least one frame exits said switch” (emphasis added). Because claim 37 depends upon claim 36 (discussed above), “said first switch” is the same first switch of claim 36, which requires adding the tag after the switch receives the frame. As already noted in the discussion of dependent claim 36, Srikanth, in contrast, teaches two switches wherein a first switch adds the tag, but a second switch strips the tag.¹³

Applicants thus respectfully submit that Srikanth does not teach or even suggest a single switch that both adds a tag to a received frame and later strips the added tag before forwarding the frame to a selected exit port, as required by dependent claim 37 (as well as the other similarly rejected claims). Further, none of the cited art overcomes these deficiencies of Srikanth. For at least these reasons, and in addition to the reasons already presented above, Applicants therefore respectfully submit that none of the cited art, either alone or together, teaches or suggests all of the limitations of dependent claims 18, 37, 56, 75 and 89. Additionally, at least for the same reasons as those presented above with regard to dependent claim 36, Applicants also respectfully submit that there is no motivation to combine Srikanth with Valdevit and Soloway. Applicants thus respectfully submit that these claims are not rendered obvious by the cited art and are all in condition for allowance.

D. Dependent Claims 19, 38, 57, 76 and 90

Applicants respectfully note that dependent claims 19, 38, 57, 76 and 90 include limitations respectively similar to dependent claims 17, 36, 55, 74 and 88, and were rejected on similar grounds.¹⁴ Applicants therefore respectfully submit that for at least the same additional reasons presented above with regard to dependent claims 17, 36, 55, 74 and 88, dependent claims 19, 38, 57, 76 and 90 are also all in condition for allowance.

¹³ See Srikanth, col. 5, lines 13-24; *see also* Srikanth, Fig. 3

¹⁴ See Office Action, ¶ 4, p. 6.

E. Dependent Claims 20, 39, 58, 77 and 91

Applicants respectfully note that dependent claims 20, 39, 58, 77 and 91 include limitations respectively similar to dependent claims 18, 37, 56, 75 and 89, and were rejected on similar grounds.¹⁵ Applicants therefore respectfully submit that for at least the same additional reasons presented above with regard to dependent claims 18, 37, 56, 75 and 89, dependent claims 20, 39, 58, 77 and 91 are also all in condition for allowance.

CONCLUSION

Applicants respectfully request reconsideration and that a timely Notice of Allowance be issued in this case. Applicants believe that no extensions of time or fees are required, beyond those that may otherwise be provided in documents accompanying this response. Nonetheless, in the event that additional extensions of time are necessary to allow consideration of this paper, such extensions are hereby petitioned under 37 CFR § 1.136(a), and any fees required (including fees for net addition of claims) are hereby authorized to be charged to Wong Cabello's Deposit Account No. 50-1922.

Respectfully submitted,

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¹⁵ See Office Action, ¶ 4, p. 6.